

AMENDMENT TO THE CLAIMS

Claims 1-4 (Canceled).

Claim 5 (Currently Amended) A method for supplying a power to a liquid crystal display, comprising the steps of:

taking a power source voltage having a constant level of less than 2.9V ~~3.0V~~ from a power source of a system;

supplying the power source voltage less than 2.9V ~~3.0V~~ to an interface circuit, a timing controller, a data driving circuit and a gate driving circuit for processing digital signal; and

raising or reducing the power source voltage less than 2.9V ~~3.0V~~ using a DC-DC converter to generate a reference voltage VDD, a common voltage VCOM, gamma voltages GMA1~10, a gate high voltage VGH and a gate low voltage VGL, wherein the reference voltage VDD, the common voltage VCOM and the gamma voltages GMA1~10 are supplied to the data driving circuit, and the gate high voltage VGH and the gate low voltage VGL are supplied to the gate driving circuit.

Claims 6-17 (Canceled).

Claim 18 (Currently Amended) An apparatus for supplying a power to a liquid crystal display comprising:

a power source of a system for generating a power source voltage having a constant level under 2.9V ~~3.0V~~;

an interface circuit, a timing controller, a data driving circuit and a gate driving circuit used to process the digital signal by taking the power source voltage; and

a DC-DC converter for raising or reducing the power source voltage under 2.9V ~~3.0V~~ to generate a reference voltage VDD, a common voltage VCOM, gamma voltages GMA1~10, a gate high voltage VGH and a gate low voltage VGL, wherein the reference voltage VDD, the common voltage VCOM and the gamma voltages GMA1~10 are supplied to the data driving circuit, and the gate high voltage VGH and the gate low voltage VGL are supplied to the gate driving circuit,

wherein the power source voltage is supplied to the interface circuit, the timing controller, the data driving circuit and the gate driving circuit.

Claim 19 (Canceled).

Claim 20 (Previously Presented) The apparatus for supplying a power to a liquid crystal display according to claim 18, wherein the interface circuit receives a synchronous signal, a clock signal and digital video data from the system; and

the timing controller controls the data driving circuit and the gate driving circuit by using the synchronous signal and the clock signal from the interface circuit,

wherein the data driving circuit supplies the digital video data to the liquid crystal panel and the gate driving circuit supplies a scan pulse to the liquid crystal panel.

Claim 21 (Canceled).

Claim 22 (Currently Amended) A method for supplying a power to a liquid crystal display, having an interface circuit, a timing controller, a data driving circuit, and a gate driving circuit for processing digital signal, comprising the steps of:

providing a first power source voltage from a power source of a system wherein the first power source voltage is 3.3V;

generating a second power source voltage having a constant level of less than 2.9V ~~3.0V~~ from the first power source voltage of 3.3V using a reducing circuit;

supplying the second power source voltage less than 2.9V ~~3.0V~~ to the interface circuit, the timing controller, the data driving circuit, and the gate driving circuit for processing digital signal of the interface circuit, the timing controller, the data driving circuit, and the gate driving circuit;

generating a reference voltage VDD, a common voltage VCOM, gamma voltages GMA1~10, a gate high voltage VGH and a gate low voltage VGL from the first power source voltage of 3.3V using a DC-DC converter; and

supplying the reference voltage VDD, the common voltage VCOM and the gamma voltages GMA1~10 to the data driving circuit and supplying the gate high voltage and the gate low voltage to the gate driving circuit ~~voltage~~.

Claim 23-26 (Canceled).

Claim 27 (Currently Amended) A method for supplying a power to a liquid crystal display, having an interface circuit, a timing controller, a data driving circuit, and a gate driving circuit for processing digital signal, comprising the steps of:

providing a power source voltage from a power source of a system wherein the power source voltage ~~[[is]]~~ has a constant level of less than 2.9V ~~3.0V~~;

supplying the power source voltage to the interface circuit, the timing

controller, the data driving circuit and the gate driving circuit;

generating a reference voltage VDD, a common voltage VCOM, gamma voltages GMA1~10, a gate high voltage VGH and a gate low voltage VGL from the power source voltage less than 2.9V ~~3.0V~~ using a DC-DC converter; and

supplying the reference voltage VDD, the common voltage VCOM and the gamma voltages GMA1~10 to the data driving circuit and supplying the gate high voltage and the gate low voltage to the gate driving voltage.

Claim 28-31 (Canceled).

Claim 32 (Currently Amended) A method for supplying a power to a liquid crystal display, having an interface circuit, a timing controller, a data driving circuit, and a gate driving circuit for processing digital signal, comprising the steps of:

providing a first power source voltage from a system wherein the first power source voltage is 3.3V;

supplying the first power source voltage of 3.3V ~~[[3.0V]]~~ to the data driving circuit and the gate driving circuit for processing digital signal of the data driving circuit and the gate driving circuit;

generating a second power source voltage having a constant level of less than 2.9V ~~[[3.0V]]~~ from the first power source voltage of 3.3V using a reducing circuit;

supplying the second power source voltage less than 2.9V ~~[[3.0V]]~~ to the interface circuit and the timing controller for processing digital signal of the interface circuit and the timing controller;

generating a reference voltage VDD, a common voltage VCOM, gamma voltages GMA1~10, a gate high voltage VGH and a gate low voltage VGL from the first power source voltage of 3.3V using a DC-DC converter; and

supplying the reference voltage VDD, the common voltage VCOM and the gamma voltages GMA1~10 to the data driving circuit and supplying the gate high voltage and the gate low voltage to the gate driving circuit voltage.